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**COST PERFORMANCE TRADEOFFS FOR THE ARMY TO
PURCHASE ONE TYPE OF UNMANNED AERIAL VEHICLE TO
SUPPORT THE ARMOR AND INFANTRY WARTIME REQUIREMENTS**

Published: 1 May 2005

by

Major William Snodgrass and Captain (P) Glenn Jenkins

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The Foundation for Innovation**

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Cost Performance Tradeoffs for the Army to Purchase One Type of Unmanned Aerial Vehicle to Support the Armor and Infantry Wartime Requirements

Presenter: Major William Snodgrass, USA

Presenter: Captain (P) Glenn Jenkins, USA

Abstract

The goal of this MBA Project is to investigate potential dichotomies between doctrine and practice in the employment of the Raven Small Unmanned Aerial Vehicle (SUAV). The Army's current Small UAV requirements are based upon the Future Combat System's Operations Requirements Document and has not been validated at the platoon or company level. The Raven SUAV is a Commercial off-the-Shelf (COTS) item that swiftly became the Army's Small UAV of choice for operations in Afghanistan and Iraq. Doctrine and Techniques, Tactics, and Procedures (TTP) have been written for the Raven SUAV; however, this document is not standard practice for all units operating the system abroad. The last review of the SUAV operational requirements was conducted in 2003 and left a gap by not specifically addressing its usage on the battlefield. In an attempt to fill that gap, this project will focus on real-world usage of the Raven SUAV system and compare doctrine versus practice using the Department of Defense's (DOD) Doctrine, Organization, Training, Material, Leadership, Personnel, Facilities (DOTML-PF) model as the primary logic construct.

The report begins by providing a thorough background of the Raven SUAV to include both its evolution from a COTS item to the Army's SUAV of choice and how it has impacted the warfighter. Next, the authors provide an overview of DOTML-PF in order to provide the basis from which the comparison of doctrine and practice will be conducted. The study then takes an in-depth look at doctrine and practice using DOTML-PF as the model for revealing potential dichotomies between the two. Finally, the authors will analyze these dichotomies and recommend solutions to help mitigate shortfalls and inconsistencies in actual Raven SUAV usage on the battlefield.



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